

S.N. 09/823,622Page 5

REMARKS

Claims 17-19 are pending in the application.

Claims 17-18 are rejected.

Claim 19 is objected to.

The rejection of claim 17 has been rendered moot by the amendment above to claim 17. Amended claim 17 recites a "Carbon-Carbon bipolar plate for proton exchange membrane fuel cells comprising machined features having dimensions between 0.1 millimeters and 1 millimeter." This claim should be allowable over the cited documents because, according to the office action, the "references of record to not show or suggest a carbon-carbon composite material which is a bipolar plate for a proton exchanger membrane fuel cell...." Claim 19, which still depends from claim 17, should also be allowed.

Method claims 24-32 have been reinstated, but now depend from claim 17. Therefore, claims 24-32 should also be allowed.

The rejection of claim 18 has been rendered moot by the amendment above to claim 18. Amended claim 18 recites a Carbon-Carbon heat exchanger core comprising a 2-D array of machined fluid passageways extending through the heat exchanger core. The fluid passageways have dimensions between 0.1 millimeters and 1 millimeter

Washburn et al. disclose a method of connecting together first and second carbon-carbon composite structures. Washburn et al. do not teach or suggest that fluid passageways of a heat exchanger can be machined.

Vidal et al. disclose that open fluid circulation channels 16 can be machined in a face of a wall of an intermediate member 14, and then closed by a

S.N. 09/823,622Page 6

heat shield 12. However, Vidal et al. do not teach or suggest forming a 2-D array of fluid passageways.

Therefore, claim 18 should be allowed over the documents made of record.

Method claims 33-41 have been reinstated, but now depend from claim 18. Therefore, claims 33-41 should also be allowed.

An added claims fee has not been incurred. The total number of claims stands at 21 (23 total claims were originally paid for), and the number of independent claims stands at two.

If any issues remain, the examiner is invited to contact the undersigned to discuss those remaining issues.